

Mr. R. Tettenhorst
P.O.Box 14020
St. Louis, MO 63178

Dear Tett.

I am enclosing copies of photos of another cabinet which I have this day received and which you may wish to add to the materials that I have previously forwarded to you. I think you will agree that this one, as was the case with yours, is a beautiful example. It is striking to me that each example is so totally different as to design, size, style and function. This would appear to confirm my suspicion that many were custom made to their owner's specifications.

It also occurs to me that it would be very difficult if not impossible to reproduce any of the examples we've seen to date. You seldom see the quality of workmanship exhibited by each of the cabinets today and even if you could find a craftsman skilled enough to reproduce one of these cabinets I would suspect that the cost would be prohibitive. Therefore, we might logically conclude that cabinets share an attribute of early copper - they aren't being made any more.

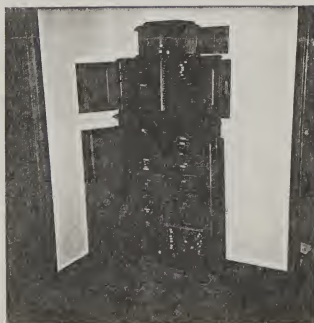
Again, my thanks for your response.

Yours truly,

Rees

Rees Kinney,
EAC 2048

JON LUSK



June 7, 1993

R. Tettenhorst
P.O. Box 14020
St. Louis, MO 63178

Dear Tet,

I find that I will be flying through St. Louis in two weeks on my way to a convention in Arizona and I can layover on either end of the trip. Would the 23rd, 24th, or the 28th of June be OK for picture taking? I would like to do both slides and regular pictures but I would think that six hours would be enough time.

My plan is to have a CD-ROM ready by the EAC next year along with a program to compare and analyze the pictures. I will be contacting Frank Wilkinson to see if he would like to participate with some of the black and whites he has of other coins. It's too bad that he didn't use color.

My day time phone is [REDACTED] and evenings is [REDACTED].
Hope to hear from you soon....

what coins do you want? 1 of a variety
Proofs & NO SLABS -
Dupes of CC or R6, R7 items BOTH
die states? in (1811 star, 2 stars) general, no but...
How many per hour 25/hr. 8 hrs.
What lighting conditions? NO SUNLIGHT.
How much room 10' or 12' table
shoot on floor

My
is
forum
power
for
1/16 cany
in

0 means "not present"
 X " " present, but not taken

LUSK

PI

93	1.3✓	95	5a.3x	04	6.14"✓	26	1.2✓
	2.2✓		5a.6✓		7.3"✓		2.6]°
	3.1✓		5b.2✓		8.6✓	28	1.2✓
	3.2✓		5b.5✓		9.1✓		2.3[.3✓
	4.1✓		6a.7x		9.4✓		3.3°✓
94	1a.2✓		6a.11✓		10.5✓	29	1.2✓ clean
	1b.2✓		6b.3°		11.7✓		1.4✓
	2a.1✓		6b.4✓		12.4✓	31	1.3°✓
	2a.2✓	96	1.2✓		13.8°		1.4✓
	2b.2✓		2.2✓		13.31x		1.6✓
	3.3✓		3.3✓	05	1.3✓		2.1✓
	3b.1✓	97	1.3x		2.2✓		2.3✓
	4.5✓		1.9°		3.4✓		3.1✓
	4.8✓		2.11✓		4.4✓	32	1.6✓
	4b.1✓		3a.2✓	06	1.3°✓		2.2✓
	5.2°		3a.3✓		2.4✓		2.5✓
	5.4✓		3b.3✓		3.2✓	33	1.5"✓
	5b.1✓		3c.2✓		4.5°✓		1.2✓
	6.2°		3c.3x	07	1.5✓	35	1.3°✓
	6.3✓	00	1.4x		08	1.1✓	2.3°✓
	6b.1✓		1.5✓		2.5✓		2.5✓
	7.4✓	02	1.3x		3.7✓	36	1.2✓
	8.3✓		1.4✓		4.1✓		2.1✓
	9.3°		2.7✓	09	1.2✓		3.1x
	9.6 SLAB✓	03	1.6✓		2.4✓		3.2✓
95	1.2✓		2.3✓		3.4✓	37	1.3✓
	1.3✓		3.3✓		4.3✓	40	1.1✓
	2a.2✓		4.3✓		5.6✓		2.1✓
	2a.4✓	04	1.4✓		6.9✓		3.2✓
	2b.2✓		2.2✓		10.1.5°✓	41	1.3"✓
	2b.3✓		2.4✓		11.1.6"✓		2.2✓
	3.4✓		3.1✓		1.4✓		3.1✓
	4.2✓		4.4✓		2.6✓	42	1.1✓
			5.7✓		3.1✓		2.1✓
			5.7	25.	1.4✓		3.2✓
					2.5✓		

LUSK

2

43. 1. 1 ✓

2. 1 ✓

3. 1 ✓

44. 1. 2 ✓

2. 1 ✓

3. 2 ✓

45. 1. 1 ✓

2. 3 ✓

3. 1 ✓

46. 1. 1 ✓

2. 1 ✓

3. 1 ✓

47. 1. 1 ✓

~~2. 1~~

3. 1 ✓

48. 1. 3 ✓

2. 1 ✓

3. 1 ✓

49. 1. 3 ✓

1. 6 ✓

2. 1 ✓

3. 2 ✓

50. 1. 6 ✓

51. 1. 3 ✓

52. 1. 1 ✓

2. 2 ✓

3. 1 ✓

53. 1. 2 ✓

54. 1. 1 ✓

2. 1 ✓

3. 2 ✓

55. 1. 2 ✓

3 ✓

56. 2. 1 ✓

3. 1 ✓

4. 2 ✓

57. 1. 2 ✓

2. 1 ✓

58. 1. 1 ✓

95. 6a. 8 ✓

95. 6a. 10 ✓

~~97. 6a. 8~~

08. 3. 4 ✓

June 15, 1993

R. Tettenhorst
P.O. Box 14020
St. Louis, MO 63178

Dear Tet,

Probably the easiest method of understanding my methods of coin digitization and display is for me to list the steps and reasons.

1) Digitizing

I'm using Kodak's PhotoCD method. It gives me 24 bit color (RGB) and a resolution of about 1700 x 1700 pixels across a coin. The original picture is about 18 megabytes which reduces to about 8.5 when the "picture" is trimmed. I've tried doing my own digitizing but find that it would take about \$20,000 worth of equipment to duplicate the resolution and noise free picture I get with Kodak.

2) Display

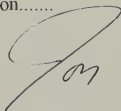
I am currently using a TI 34020 chip board for graphics. I have found that 800x600 seems to give enough resolution to work with. Since the original data is a little over twice this it gives me some room on zooming without pixel replication. My goal was to have the screen fill with a date on a coin without having noticeable "stair stepping". By using the 34020 chip I can write downloadable code for the board and have some of my operations perform much quicker. One of the points I made in the talk was about the importance of dot pitch on the monitor.

3) My main computer program uses a DOS Extender so that I can manipulate my pictures in memory. I run in 16 megabytes, but probably should have 32 to make some of the operations go faster. I haven't decided yet whether the final program that I produce will require a 34020 chip graphics board or not.

4) The production of a CD-ROM disc is my goal. I actually think that two discs will be required because of the number of pictures I would like to publish.

I don't know if the slides are of any help but I am including them.

See you soon.....

A handwritten signature in black ink, appearing to be 'Jm' or similar, written in a cursive style.



Coin Digitization and Computer Display

**by Jon Lusk
EAC #351**

Topics

History of comparison efforts

Digitization

- ☐ Definition of terms
- ☐ History of efforts
- ☐ Current methods

Computer Display

- ☐ Hardware
- ☐ Software
- ☐ Use as a variety research tool

Electronic Publishing

Terms

Pixel	Smallest element of an image.
Resolution	The density of pixel sampling. The higher the resolution the greater the detail.
RGB	An additive color model that forms color by mixing various ratios of red, green, blue.
Color Depth	The number of different colors that can be represented by the color model used.
True Color	A color model that to the human eye looks continuous. (Exceeds 4 million colors)

Terms II

Digitize

Turn continuous signal into discrete values

Palette

A set of colors available for display of an image

Computer Display Options

	VGA	SVGA	TI34020	
Resolution	640x480	800x600	1024x768	
Color Depth	256	32,000	16 Mil.	
Graphics Processor	No	No	Yes	
Screen Dot Pitch	.35mm	.30mm	.28mm	.26mm

Digitizing Options

Method	Cost	Advantages	Drawbacks
TV Camera	\$2,200	Fast turnaround	Noise, low resolution
Color CCD	\$24,000	Fast turnaround	Cost
Slide Scanner	\$1,300	Medium Resolution and turnaround	Photo first
Kodak Photo CD	\$1.50ea	High resolution	Photo first Slow

Electronic Publishing

Formats Available

- ☐ Kodak Photo-CD
- ☐ Philips CD-I
- ☐ ISO 9660

Capacity

- ☐ 100 High resolution RGB
- ☐ Plus 100 low resolution and/or voice

Costs

- ☐ Media (\$10 to \$2000)
- ☐ Display hardware (\$700 to \$4000)

Image Manipulation

Measurements

- ☐ Angles, distances, rotations

Comparisons

- ☐ Image on image
- ☐ Image on pseudo image
- ☐ Image on mirror image

Study

- ☐ Zoom

July 3, 1993

R. Tettenhorst
P.O. Box 14020
St. Louis, MO 63178

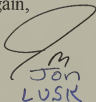
Dear Tet,


Thanks so very much for the opportunity to photograph your coins. I kept my fingers crossed after I sent them to be processed, one never knows what might happen. I even insured them for \$2,000! I thought, "Well, if they lose them, at least each of us could have a thousand dollars to do it again".

Of course, my next concern was that I had done something wrong in the process, or the old film would really be a problem, or any number of things. All is well though. I now have a few months of processing, but I feel that I can have a disc ready for Las Vegas.

I thought that I might play with one of the two Gilbert coins (04 or 08) and that I would save the other for you to study. So, take your choice. Which would you like to analyze?

Thanks again,


Jon
LUSK


percom
Balt 7/30/93

mlk
noted

1 July, 1997

R. Tettenhorst
P.O. Box 14020
St. Louis, MO 63178

Dear R. Tettenhorst,

We wish to apologize for the delay in shipping of the new version of *Penny-Wise Research Library on CD-ROM*. The extra time taken was used to narrow the text to maximum of 77 characters per line, so that you would not have to scroll left and right while reading. In addition we have created a live video and sound tutorial for Windows users that will be included on the CD-ROM. We are also working on converting the *Penny-Wise Research Library on CD-ROM* into the .PDF format, which will allow for display of all images automatically as you go through the pages of Penny-Wise without having to first activate image links. We will provide you with both formats for viewing your cardfiles (already familiar Textware and the new .PDF), so you may choose to use either one.

We are committed to shipping *Penny-Wise Research Library on CD-ROM* in July.

Thank you for your support and patience.

Sincerely,



Jon Lusk
President



DIGITAL DYNAMICS, INC.

3055 Plymouth Road

Ann Arbor MI 48105

313.995.2400 - FAX 313.995.3232

Invoice

DATE

INVOICE #

4/30/97

108553

BILL TO

R. Tettenhorst
Post Office Box 14020
St. Louis MO 63178

SHIP TO

R. Tettenhorst
Post Office Box 14020
St. Louis MO 63178

P.O. NUMBER		TERMS	SHIP	VIA	F.O.B.	PROJECT	
		Prepaid	4/30/97	US Mail	ORIGIN	Tettenhorst, R. 152	
QUANTITY	ITEM CODE	DESCRIPTION			PRICE EACH	AMOUNT	
1	50-04000	Penny-Wise Research CD-ROM Version 2			117.00	117.00	
1	20-00100	Shipping and Handling Charge			4.00	4.00	
	50-04001	Ordered at EAC Convention			-5.00	-5.00	
	50-04002	Paid for at EAC Convention			-10.00	-10.00	
	50-04003	Return of Volume 1 CD-ROM			-40.00	-40.00	
Thank you for your order We will be shipping it by June 15, 1997							
Thank you!					Total	\$66.00	

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PENNY-WISE
RESEARCH LIBRARY
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see
below
Lusk
pd cash

ORDER FORM

Penny-Wise Research Library on CD-ROM (Version 2) 1969-1996

\$117.00

Shipping \$ Handling

\$4.00

- 10

DISCOUNTS

Ordered at EAC Convention

- \$5.00

Paid for at EAC Convention (-\$10.00)

- 40

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☐ 1 year or more -\$40.00

☐ 6 to 12 months -\$60.00

☐ 3 to 6 months -\$75.00

☐ 0 to 3 months -\$94.00

(check one to receive return discount)

owe him
this

66

Name: _____

Ship to: _____

If return credit is claimed above, signer agrees to either return their CD-ROM Version 1, or pay the above credit given for its return.

Signed _____ Date _____ EAC# _____

4/22/97 CD ROM - Jon Lusk - \$40 credited for returning old CD that he made for BE on his coins. BE owes him the old CD or another \$40. After David gets home, look at old and new CDs with David's help and see whether you want to return the old one. It may be the old one has BE's collection on it and the new one has the full library. This would make it desirable to have both.

C1, C2

disk for Jon Lusk.

Remind him he was going to tell you about the thin lettered edge planchet 1795 that he owns.

Also call Bob Grellman about when it appeared in one of his auctions and offered a profit to the buyer.

mb
7/2/97

Have my
collection

HOME

for Harry
We few, we
happy few, we
band of brothers...
Harry the King...

~~Harry has a~~ at home

Blue surface CD 5 1/4" (silver side)
27 yrs. PM research library
on CD Rom

FOL

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

July 28, 1997

Mr. Jon Lusk, President
Digital Dynamics
3055 Plymouth Road
Ann Arbor, MI 48105

Dear Jon:

At this time I cannot find the CD which I intended to send you. Therefore, I am enclosing a check for \$40.

I am still anxious to hear about the thin planchet lettered edge 1795 that you own. What variety is it, and what is its weight? Also, if you would be willing to sell it, I would be happy to replace it with a better quality regular weight specimen or pay you a significant profit. If you do not want to sell it, please do let me have the answers to the above questions, since I am preparing an article for Penny-Wise on this matter.

Sincerely,



R. Tettenhorst

mb

Enclosure

Aug, 4, 1997

R. Tettenhorst
PO Box 14020
St. Louis, MO 63178

Hi Tet,

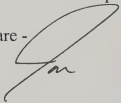
Thanks for your letter. I checked out my thin, lettered, 95C2(a-b-c???). It's 88.88, which is a little heavy (about 5%), but it really looks like my other thins. I'll be very interested in reading what the other strange one's weight. What is the population of lettered thin '95's?

As far as trading, it's OK with me. I'm not overly attached to it (unlike my double edge lettered '94, in both directions no less). It's VG7 or 8 by ware, but it looks to have been buried, so the surface corruption is a problem (very dark too). Probably a net 3 coin (maybe 4, but that would be the owner in me talking). So, make some proposals, or ask me for my want list.

Speaking of '95C2b, did you buy the one from the latest mail bid sale?? I didn't go to ANA, probably should have, but I've already taken a ton of vacation this summer (Alaska and St. Martin) so I didn't go. Did you?

The CD is due out latter this week - if UPS strike doesn't slow it up coming from the plant and I can ship some other way.

Take care -


Jon D. Lusk
Digital Dynamics
3055 Plymouth Rd.
Ann Arbor, MI 48105
(313) 995-2400
(313) 995-3232 fax

949c 80.7
87.2
• 85.6

952c 81.89g.
2c.2 81.6
88.9 Lusk

95C1b 95.7
92.7
91.5
77.3 End

3/2 Wayne Lerner
908.
2720

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

Aug 28, 1997

Dear Jon,

Thank you very much for the information on your thin lettered edge 95 C2's weight. Yes, I would very much like to acquire it, either by trade or purchase. The information that I have so far on this category is as follows:

1795 #2	88.9 gr. (Yours)
	81.8 gr.
	81.6 gr.
1795 #1	95.7 gr
	92.7 gr
	91.5 gr
	77.3 gr.
1794 #9	87.2 gr.
	85.6 gr.
	80.7 gr.

Comments:

- A) Total population is ten. But only one (the Brubaker 95 C1) has appeared in the literature. Certainly there are many more unattributed by weight in the substantial population of these varieties. My guess: 30 to 50 or more.
- B) You will notice that I have included 1794 C9. These are the three lettered edge varieties actually struck from mid-1795 on, after Congress and the President had approved the shift to a lighter weight. No 1794 light-weight planchets are known to me before C9. Ten out of ten after approval of weight change. Too much for coincidence. My theory is beginning to emerge. Some sort of trial piece for the new weights being considered. The conclusion: thinner

planchets work fine obverse and reverse, but are too thin for edge lettering. Therefore leave it off. People don't file copper coins anyway, which is the reason for edge devices on silver and gold coins.

C) as to price or value in trade: The last 9562 like this that I acquired was in the 1997 EAC Sale, 81.6 gr, lot 53. Sharpness of 5, net 2, ugly, bent a little, etc. I paid \$425 plus commission for it, but was prepared to go higher. An equivalent value for yours might be high three figures. Also, I paid \$400 last month for a 1795 CI 95.7 gr. It was lot 794 in Grallman's Joe Dadey Sale 1/11/97, where I missed seeing it. In that sale it brought \$95 plus commission. So name your price or send me a want list. Please keep yourself my theory about these coins until I write an article about it for Penny Wise. But I did want you to have the essential facts (and my opinions) so that I would not be taking advantage of you. Perhaps, I discussed this with you at EAC, but I'm not sure.

Regards to Sally,

Tell

FOL

R. TETTENHORST
P. O. Box 14020
Saint Louis, Missouri 63178

September 23, 1997

Mr. Jon D. Lusk
Digital Dynamics
3055 Plymouth Rd.
Ann Arbor, MI 48105

Dear Jon:

Enclosed is a brief paragraph about Lusk, Wyoming from the "Wyoming Visitor" magazine.

Did you ever decide what you would like to have in exchange for your thin planchet lettered edge half cent?

Sincerely,



R. Tettenhorst

mb

Enclosure

9/30/97

Dear Tet,

Sorry for being so slow. I've been out of town for part of the time, but I'm still too slow.

Thanks for the Lusk stuff. I haven't been, but my daughter has been.

As you can see, I've enclosed the coin. I thought it would be better if you got a chance to see it in person. There's no problem if it doesn't meet your requirements, or we can't agree on a trade. I've listed my wants below and there's no problem if there needs to be some \$ going one direction or the other. You mentioned that you had a 95 C2b upgrade to trade, perhaps that's the answer.

	<u>Have</u>	<u>Would like</u>	
94 C8	G5	F12	Ruby 185 460 4500
95 C2b	AG3	G5	94.8.2 924 "VF" 12-10
09 C2	F15	VF30	509.2.3 1011 EF+ or AU Shavers 850-1100
11 C1	F12	VF25	310

If these don't work out you mention what you do have for trade. I think I'm set for everything after 1811 though.

Hope to hear from you soon (sooner than the amount of time it took me to respond).

Your friend --



THIRD ANNUAL
HALF CENT HAPPENING

The third annual HALF CENT HAPPENING will take place on Friday evening, November 25th, at the home of Jon and Sally Lusk. The festivities will begin around 7 PM and will continue into the small hours of the morning (last year things wound down around 5 AM).

Activities will include (but not be limited to) a "show-and-tell", whist matches, and trading/selling. A scale and stereo microscope will be available for use. Topics of discussion will include the attribution and grading of half cents and the proper way in which to preserve and store copper coins.

A buffet supper will be served early in the evening and breakfast will be available on Saturday morning for those who stay over.

As you may know, the Michigan State Numismatic Show is held that weekend, Friday through Sunday, and it is about a 40 minute drive from Ann Arbor. This gives the coin buff an additional reason to come. Spouses and/or friends are more than welcome.

For those wishing to stay overnight, the following accomodations will be available:

An extra bed
Plenty of floor space (BYO sleeping bag)
A cot and a couch
Motel (a Marriot Inn is located less than a mile away)
Let us know if you want us to make reservations.

Please let us know if you are planning to attend so that we can plan for the right size group. Maps and directions will be sent upon request. (The location is not the same as last year.) Contact either:

Jim McGuigan
Box 1934
Ann Arbor, MI 48106
(313)-769-4384

Jon Lusk
Box 123
Ann Arbor, MI 48107
(313)-995-2123

ANN ARBOR MARRIOTT
'94's + '95's
errors
'08 "63"